	A	В
1		TABLE 1 - 12/28
2		D QC SAMPLING
3		IDENTIAL GROU
4	DIMOCK, SUSQU	EHANNA COUN
5	F	ort Meade L
6 7	Parameter/Method	Matrix
8	Alkalinity (SM 2320B) (Total Hardness, HCO3, CO3) (2320B, 2340B)	drinking water
9	Alcohols: Ethanol, methanol, 1-propanol, 1-butanol, 2-butanol (8015D)	drinking water
10	Anions, Chloride, Bromide, Fluoride, Nitrate/Nitrite as N, Orthophosphorus as P, Sulfate as SO4 (300.0)	drinking water
11	Glycols incl. 2-Butoxyethanol (8321 Modified)	drinking water
	Metals: Al, Ca, Cr, Cu, Fe, Mg, Mn, Ni, Na, As, Se, Zn, Ti, Sr, Ba, Sn, Sb, Be, Cd, Co, Tl, U, VK, Hg (200.8/245.1)	drinking water
	Metals: Al, Ca, Cr, Cu, Fe, Mg, Mn, Ni, Na, As, Se, Zn, Ti, Sr, Ba, Sn, Sb, Be, Cd, Co, Tl, U, VK, Hg (200.8/245.1)	Filtered drinking water
14	pH (9040C)	drinking water
15	Phosphorus, Total (365.1)	drinking water
16	Nitrate/Nitrite (353.2)	drinking water
17	Semi-Volatiles (TCL plus TICs) (CLP Trace plus TICS) (OLC03.2)	drinking water
18	1-methylnapthalene (8270 or equivalent)	drinking water
19	Volatiles Incl. Acrylonitrile (TCL plus TICs) (CLP Trace - 0.5 ug/L QL) (OLC03.2)	drinking water
20	Solids, Total Dissolved (TDS) (2540C)	drinking water
21	Solids, Total Suspended (TSS) (2540D)	drinking water
22	Notes.	Key:
23	1. This QA sample will be an aqueous matrix.	Bkgd = Backg
24	2. Sample to be collected only if non-dedicated sampling equipment is used.	MS/MSD = Ma
25	3. Estimate based on 5 sampling days	CRQL = Contra

	А	В
26		Dup = Duplica

	А	В
27	Т	ABLE 1 - 12/28
28		QC SAMPLING
29	DIMOCK RESI	DENTIAL GROU
30	DIMOCK, SUSQUI	EHANNA COUN
	FC	PA Region 9
31		A Region 3
32	Parameter/Method	Matrix
33		
	Dissolved Gases, Methane, Ethane, & Ethene (RSK-175)	drinking
34	Dissolved dases, Methane, Ethane, & Ethene (NSN-173)	water
	DRO (8015M)	drinking
35	DNO (6013IVI)	water
	Oil & Grease (HEM) (1664A)	drinking
36	011 & 010030 (112111) (200 11 t)	water
100000000	GRO (8015M)	drinking
37	TNOTES.	water
38		Key:
39	1. This QA sample will be an aqueous matrix.	Bkgd = Backg
40	2. Sample to be collected only if non-dedicated sampling equipment is used.	MS/MSD = Ma
41	3. Estimate based on 5 sampling days	CRQL = Contra
42		Dup = Duplica

	A	В
43	Т	ABLE 1 - 12/28
44	FIELD AND	QC SAMPLING
45	DIMOCK RESI	DENTIAL GROU
46	DIMOCK, SUSQUI	EHANNA COUN
47	EF	PA Region 2
48	Parameter/Method	Matrix
50	Methylene Blue Active Substances (MBAS) (SM 5540C)	drinking water
51	Notes.	Key:
52	1. This QA sample will be an aqueous matrix.	Bkgd = Backg
53	2. Sample to be collected only if non-dedicated sampling equipment is used.	MS/MSD = Ma
54	3. Estimate based on 5 sampling days	CRQL = Contra
55		Dup = Duplica

	А	В
56	т	ABLE 1 - 12/28
57		QC SAMPLING
58		DENTIAL GROU
59	DIMOCK, SUSQUI	EHANNA COUN
60		Isotech Lat
61	Parameter/Method	Matrix
62		1
62	d ¹³ C and d ² H of methane (isotech)	drinking
63		water
64	d ¹³ C of inorganic carbon (isotech)	drinking water
U-		drinking
65	Stable isotopes of water (O,H) (isotech)	water
66	Complete compositional analysis of headspace gas (isotech)	drinking water
67	Diss. gases methane, ethane, ethene (isotech)	drinking water
68	TVOLES.	Key:
69	1. This QA sample will be an aqueous matrix.	Bkgd = Backg
70	2. Sample to be collected only if non-dedicated sampling equipment is used.	MS/MSD = Ma
71	3. Estimate based on 5 sampling days	CRQL = Contra
72		Dup = Duplica

	A	В
73	ī	ABLE 1 - 12/28
74		O QC SAMPLING
75	DIMOCK RESI	DENTIAL GROU
76	DIMOCK, SUSQU	EHANNA COUN
77		NAREL Lab
78 79	Parameter/Method	Matrix
80	Gamma Spec (K-40, Ra-226, Ra-228, Th-232, Th-234, U-234, U-235, U-238) (901.1)	drinking water
81	Gross Alpha/Beta (900.0)	drinking water
82	Notes.	Key:
83	1. This QA sample will be an aqueous matrix.	Bkgd = Backg
84	2. Sample to be collected only if non-dedicated sampling equipment is used.	MS/MSD = Ma
85	3. Estimate based on 5 sampling days	CRQL = Contra
86		Dup = Duplica

	A	В
87		ABLE 1 - 12/28
88		QC SAMPLING
89		DENTIAL GROU
90	DIMOCK, SUSQUI	EHANNA COUN
91	Те	chLaw Pace
92	Parameter/Method	Matrix
93		
94	Bacteria (total coliform, HPC)	drinking water
95	Ethylene Glycol (8015M)	drinking water
96	2-Methoxyethanol (8015B)	drinking water
97	Ra-226 (903.1)	drinking water
98	Ra-228 (904.0)	drinking water
99	Turbidity, Nephelometric (180.1)	drinking water
100	TVOLES.	Key:
101	1. This QA sample will be an aqueous matrix.	Bkgd = Backg
	Sample to be collected only if non-dedicated sampling equipment is used.	MS/MSD = Ma
-	3. Estimate based on 5 sampling days	CRQL = Contra
104		Dup = Duplica

	С	D	Е	F	G	Н	1	J	K	L		
	/11											
3	SUMMARY NDWATER SI	TE										
-	TY, PENNSYL											
-	ab											
_												
6	Field	Bkgd		QC	Sample Summ	ary			eld and alyses (not			
7	Samples		Dup	Trip ¹ Blanks	Rinsate ^{1'2} Blanks	Field ¹ Blanks	MS/MSD	including	MS/MSD) ³			
8	60	0	6	0	0	5	0	7	1			
9	60	0	6	0	0	5	3	7	1			
10	60	0	6	0	0	5	0	7	1			
11	60	0	6	0	0	5	0	7	1			
12	60	0	6	0	0	5	6	7	1			
13	60	0	6	0	0	5	6	7	1			
14	60	0	6	0	0	5	0	7	1			
15	60	0	6	0	0	5	0	7	1			
16	60	0	6	0	0	5	0	7	1			
17	60	0	6	0	0	5	3	7	1			
18	60	0	6	0	0	5	0		1			
19	60	0	6	1 per cooler	0	5	3		Blanks for olers			
20	60	0	6	0	0	5	0	7	1			
21	60	0	6	0	0	5	0	7	1			
22												
23	round				QA/QC = Qua	lity assurance	ce/quality co	ontrol				
24	trix Spike/Ma	itrix Spike	Duplicate		Sr = Strontium							
25	ct-Required (Quantitatio	on limit.									

	С	D	Е	F	G	Н	1	J	K	L
26	ite	,								

	С	D	Е	F	G	Н	1	J	K	L				
27	<u>/11</u>													
28	SUMMARY													
29	NDWATER SITE													
30	TY, PENNSYLVANIA													
31	Lab													
32	QC Sample Summary Total Field and OA/OC Analyses (not													
33	Samples		Dup	Trip ¹ Blanks	Rinsate ^{1'2} Blanks	Field ¹ Blanks	MS/MSD	including						
34	60	0	6	0	0	5	0	7	'1					
35	60	0	6	0	0	5	0	7	'1					
36	60	0	6	0	0	5	0	7	1					
37	60	0	6	0	0	5	0	7	1					
38														
39	round				QA/QC = Qua	lity assurance	ce/quality co	ontrol	1					
40	trix Spike/Ma	itrix Spike	Duplicate		Sr = Strontium	Ì								
41	ct-Required C	Quantitatio	on limit.											
42	5000													

	С	D	Е	F	G	Н	[J	К	L			
43	/11												
44	SUMMARY												
45	NDWATER SI	ITE											
46	TY, PENNSYLVANIA												
47	Lab												
48	Field	Bkgd		QC Sample Summary Total Field and QA/QC Analyses (not									
49	Samples	- 633	Dup	Trip ¹ Blanks	Rinsate ^{1'2} Blanks	Field ¹ Blanks	MS/MSD	including	MS/MSD) ³				
50	60	0	6	0	0	5	0	7	'1				
51													
52	round	I.	1	1	QA/QC = Qua	lity assuranc	ce/quality co	ontrol					
	trix Spike/Matrix Spike Duplicate Sr = Strontium												
53	trix Spike/Ma	atrix Spike	Duplicate		Sr = Strontium					l .			
	trix Spike/Ma ct-Required (150		Sr = Strontium								

	С	D	Е	F	G	Н	1	J	K	L			
56	/11												
57	SUMMARY												
58	NDWATER SI												
59	TY, PENNSYL	VANIA											
60													
61	QC Sample Summary Total Field and QA/QC Analyses (not												
62	Samples		Dup	Trip ¹ Blanks	Rinsate ^{1'2} Blanks	Field ¹ Blanks	MS/MSD	1	including MS/MSD) ³				
63	10	0	0	0	0	0	0	1	.0				
64	10	0	0	0	0	0	0	1	LO				
65	10	0	0	0	0	0	0	1	LO				
66	10	0	0	0	0	0	0	1	LO				
67	10	0	0	0	0	0	0	1	10				
68													
69	round				QA/QC = Qua	lity assurand	ce/quality co	ontrol	•				
70	trix Spike/Ma	trix Spike	Duplicate		Sr = Strontium								
	ct-Required C	- 12	1963										
72	1,21												

	С	D	Е	F	G	Н	ľ	J	К	L
73	/11									
74	SUMMARY									
	NDWATER SI									
76	TY, PENNSYL	VANIA								
77										
78	QC Sample Summary Total Field and QA/QC Analyses (not									
79	Samples	Dup		Trip ¹ Blanks	Rinsate ^{1'2} Blanks	Field ¹ Blanks	MS/MSD	including MS/MSD) ³		
80	60	0	6	0	0	5	0	7		
81	60	0	6	0	0	5	0	7		
82										
83	QA/QC = Quality assurance/quality control									
84	trix Spike/Ma	Duplicate		Sr = Strontium						
85	ct-Required C	Quantitatio	on limit.							
86	5 ate									

	С	D	Е	F	G	Н	1	J	K	L
87										
	SUMMARY NDWATER SITE									
	TY, PENNSYL									
90	II, PLINIVOIL	VAINIA								
91	Lab									
92	QC Sample Summary Total Field and QA/QC Analyses (not									
93	Samples	***	Dup	Trip ¹ Blanks	Rinsate ^{1'2} Blanks	Field ¹ Blanks	MS/MSD	including		
94	60	0	6	0	0	5	0	7	'1	
95	60	0	6	0	0	5	0	7	'1	
96	60	0	6	0	0	5	0	7	'1	
97	60	0	6	0	0	5	0	7	'1	
98	60	0	6	0	0	5	0	7	'1	
99	60	0	6	0	0	5	0	7	'1	
100										
101	1round QA/QC = Quality assurance/quality control									
102	trix Spike/Ma	atrix Spike	Duplicate		Sr = Strontium					
103	ct-Required Quantitation limit.									
104	ate									

	Α	В	С	D	E	F	G	Н	
1		L2/28/11							
3	SAMPLE ANALYTICAL REQUIREMENTS SUMMARY DIMOCK RESIDENTIAL GROUNDWATER SITE								
4	DIMOCK RESIDENTIAL GROUNDWATER SITE DIMOCK, SUSQUEHANNA COUNTY, PENNSYLVANIA								
5									
6	Analytical p	parameter and Method	IVIa	trix	Sample Preservation		Holdir	ng Time	
7		ethanol, 1-propanol, 1-butanol, 2- utanol (8015D)	drinkin	drinking water		lce, 6°C		days	
8	Alkalin	ity (2320B, 2340B)	drinkin	g water	lce,	6°C	14	days	
9	877	nide, Fluoride, Nitrate/Nitrate as N, s as P, Sulfate as SO4 (300.0)	drinkinį	g water	lce,	6°C	28	days	
10	Bacteria	(total coliform, HPC)	drinkin	g water		8% Na2S2O3 Cl- present)	6 h	ours	
11	d13C and d2	2H of methane (Isotech)	drinkin	g water		ocide pill in container	6 months		
12	d13C of ino	rganic carbon (Isotech)	drinkin	ng water Ice, 4°C		4°C	6 months		
13	Complete composit	ional analysis of headspace gas (isotech)	drinkin	g water	Ice, 4°C, biocide pill in sample container		6 months		
14	Diss. gases metha	ane, ethane, ethene (isotech)	drinkin	g water	Ice, 4°C, biocide pill in sample container		6 months		
15	Dissolved Gases, Metl	hane, Ethane, & Ethene (RSK-175)	drinkin	g water	pH<2 with HCl and cool with ice, 4°C		7 (days	
16	Ethyle	ne Glycol (8015M)	drinkin	g water	Ice, 4°C		7 (days	
17	С	DRO (8105M)	drinkin	g water	Ice, 4°C			act; 40 days alysis	
18	C	GRO (8105M)	drinkin	g water	pH<2 with HCl and cool with ice, 4°C		14 days		
19	Gamma Spec (K-40, R 235	drinkin	g water	pH<2 with HNO3 and cool with ice, 4°C		6 months			
20	Glycols incl.	drinkin	g water	Ice, 6°C		7 (days		
21	Gross Alpha/Beta (900.0)		drinkin	g water	pH<2 with HNO3 and cool with ice, 4°C		6 m	onths	
22	Metals: Al, Ca, Cr, Cu, Sr, Ba, Sn, Sb, Be, Cd	drinkin	g water	pH<2 with HNO3 and cool with ice, 4°C		6 months			
23	Metals: Al, Ca, Cr, Cu, Sr, Ba, Sn, Sb, Be, Cd	(filtered) dri	nking water	pH<2 with HNO3 and cool with ice, 4°C		6 months			
24	Methylene Blue Activ	re Substances (MBAS) (SM 5540C)	drinkinį	g water	lce,	4°C	48 l	nours	

	А	В	С	D	Е	F	G	Н	
					pH<2, H2SO4, and cool				
25	Nitrate/Ni	trite (Total N) (353.2)	drinking water		with ice, 4°C		7 days		
26	0:1.9.0	drinking water		pH<2, H2SO4, and cool with ice, 4°C		28 days			
20	Oil & Gro	arinkin	g water	With i	ce, 4 C	28	aays		
27		pH (9040C)	drinkin	g water	Ice	, 6°C	As soon a	As soon as possible	
								7.6 30011 d3 p0331810	
28	Phosph	orus, Total (365.1)	drinkin	g water	lce,	, 6°C	28	days	
					pH<2 with H	NO3 and cool			
29	R	a-226 (903.1)	drinkin	g water	with i	ce, 4°C	6 m	onths	
					pH<2 with H	NO3 and cool			
30	Ra	a-228 (904.0)	drinkin	g water	with i	ce, 4°C	6 m	onths	
31	Comi Valatila	(TCL plus TICs) (OLCO2.2)	- الما مشرام	a water	fe-	6°C	7	lave	
21	Semi-volatiles	(TCL plus TICs) (OLC03.2)	urinkin	g water	ice	, 6°C	7 days		
32	Solids, Total D	issolved (TDS) (SM 2540C)	drinkin	g water	lce	, 6°C	7 days		
33	Solids, Total Su	spended (TSS) (SM 2540D)	drinking water		Ice, 6°C		7 days		
2.4					1 400		6 months		
34	Stable isotope	s of water (O,H) (Isotech)	drinking water		Ice, 4°C		6 months		
35	Turbidity, I	Nephelometric (180.1)	drinking water		lce,	Ice, 4°C		nours	
200									
36	2-Meth	oxyethanol (8015B)	drinking water		lce,	Ice, 6°C		days	
37	1-methylnapth	alene (8270 or equivalent)	drinkin	g water	Ice, 6°C		7 days		
	100 100 100 100 100 100 100 100 100 100	TICs) (CLP Trace - 0.5 ug/L QL)			2 drops of 1:1 HCl, pH<2,				
38	,	2) incl. Acrylonitrile		g water	1	, 6°C		days	
	•	ll be combined into sample	bottles as a	pplicable/a	ppropriate	based on d	eterminati 	on by lab(s)	
	KEY: Celsius		milliliter						
	C14 = Carbon 14		= Sodium						
	CLP = Contract Lab		potential						
	D13C = delta of		QL =						
45	D2H = delta of		Sr =						
46	Acid		Target						
	density		Tentativel						
N 000	HN03 = Nitric Acid		microgra						
49	Heterotrophic		paramete						

	1	J	K	L	М
1					
3					
4					
5				Procurement	Number
6		Sample Cont	ainer(s)	Source or Lab	
7	Three 40-m	l glass vials (Fill t space	o capacity with no head	Ft. Meade	3
8		One 500-m	I HDPE	Ft. Meade	1
9		One 500-m	I HDPE	Ft. Meade	1
10	12	5 ml Pre-sterilize	d polyproylene	Tier 4	1
11		one 1-L pol	y/TBD*	Tier 4	1
12		one 1-L pol	y/TBD*	Tier 4	1
13		one 1-L pol	y/TBD*	Tier 4	1
14		one 1-L pol	y/TBD*	Tier 4	1
15		One 40-ml g	lass vial	Tier 4	1
16	Three 40-m	l glass vials (Fill t space	o capacity with no head	Tier 4	3
17			s with teflon-lined lids		2
18	Three 40-m	l glass vials (Fill t space	o capacity with no head		3
19		One 1-Lite		Tier 4	1
20	Three 40-m	l glass vials (Fill t space	Ft. Meade	3	
21		One 1-Lite	Tier 4	1	
22		One 1-Lite	Ft. Meade	1	
23		One 1-Lite	HDPE	Ft. Meade	1
24		One 500-m	I HDPE	Tier 4	1

	1	J	К	L	М
25	Two 1-Lite	er amber glass jar	s with teflon-lined lids	Ft. Meade	2
26	One 1-Lite	er amber glass jar	Tier 4	1	
		8 1			
27		One 250-m	I HDPE	Ft. Meade	1
28		One 400-m	I HDPE	Ft. Meade	1
29		One 1-Liter	HDDE	Tier 4	1
25		One 1-Liter	HUFE	TICI T	
30		One 1-Liter	HDPE	Tier 4	1
31	Two 1-Lite	er amber glass jar	s with teflon-lined lids	Ft. Meade	2
22		0 500	LUDDE	Et Manda	1
32		One 500-m	I HDPE	Ft. Meade	1
33		One 500-m	I HDPE	Ft. Meade	1
34		one 1-L poly	//TBD*	Tier 4	1
35		One 250-m	I HDPE	Tier 4	1
36	Two 1-Lite	er amber glass jar	s with teflon-lined lids	Tier 4	2
37	Two 1-Lite	er amber glass jar	s with teflon-lined lids	Tier 4	2
38	Six 40-ml glas	ss vials w/Teflon	lined cap (no head space)	Ft. Meade	6
39	•.				50
40					
42					
43					
44					
45					
46					
47					
48 49					
49					